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**REPORT**

**OPERATION HICKORY**

**24 July 1967**

**HQ PACAF**

**Directorate, Tactical Evaluation  
CHECO Division**

**Prepared by:** **Mr. Warren A. Trest**  
**Major Valentino Castellina**  
**Mr. Lawrence J. Hickey**

**S.E. Asia Team**

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FOR THE COMMANDER IN CHIEF

*Edward C. Burtenshaw*  
EDWARD C. BURTENSHAW, Col, USAF  
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## OPERATION HICKORY

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OPERATION HICKORY

1. Introduction

One of the principal restraints on the application of airpower in Southeast Asia, pursuant to Air Force doctrine, is the lack of a single manager for all air assets within the theater. In 1961, when the Tactical Air Control System (TACS) was introduced into the Republic of Vietnam (RVN), USAF announced policy called for central control of air resources in SEA: however, more than five years later, the single manager concept has yet to be established. USAF and VNAF sorties, with U.S. Navy sorties when applied in-country, are centrally controlled through the 7th AF Tactical Air Control Center (TACC); but the U.S. Marine air element in I Corps still maintains its own system of control. Marine sorties are flown primarily in support of Marine ground operations, with minimal sorties above their own requirements being furnished to <sup>1/</sup> the 7AF TACC for control.

As the Deputy Commander for Air, MACV, (the 7AF Commander) is responsible for air posture in the theater and for insuring that optimum air support is provided to COMUSMACV's prosecution of the war. In the long course of the Vietnam conflict, considerable evidence has supported the USAF position that airpower could be more effectively applied if all air assets were under the central control of the Deputy Commander for Air. One of the most recent indications of this developed during Operation HICKORY, the first overt US/ARVN attack into the controversial Demilitarized Zone (DMZ). In this joint operation, launched on 18 May 1967,

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there were command and control problems which limited the application of air, and which were related to the weaknesses inherent in the existing air control structure.

The scenario of Operation HICKORY called for a multipronged assault into the DMZ, with forces of the 3rd Marine Division and Vietnamese Army (ARVN) units striking north into the heart of the lowland area, and a Marine landing force sweeping in from the eastern coast. Air support for the Marine units, including the landing force (SLF Alpha), was to be provided by the Marine tactical air arm, while close support for ARVN forces was to be provided by the 7AF TACS. On the day prior to the operation, the TACS was to provide USAF aircraft for preparatory strikes immediately north of the DMZ, with the Marines conducting air strikes inside the zone. The TACS was to provide continuous suppression strikes north of the attacking forces throughout the course of the operation. <sup>2/</sup> Obviously, in a multi-force operation of this nature, joint planning and close coordination were key tactical prerequisites. In the early phases of Operation HICKORY, however, several situations arose which indicated an inadequacy in joint planning. Breakdowns in the system of coordination on air requirements, on at least two occasions, jeopardized friendly forces. Had airpower been applied under a system of centralized control, it is likely these breakdowns could have been avoided.

## 2. The Planning Phase

Although it was one of the most ambitious ground assaults in the Vietnam conflict to date, all evidence indicates that Operation HICKORY

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## OPERATION HICKORY

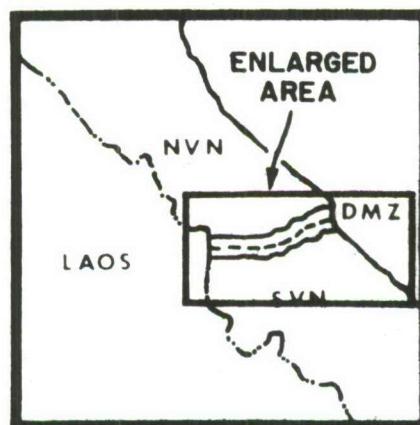
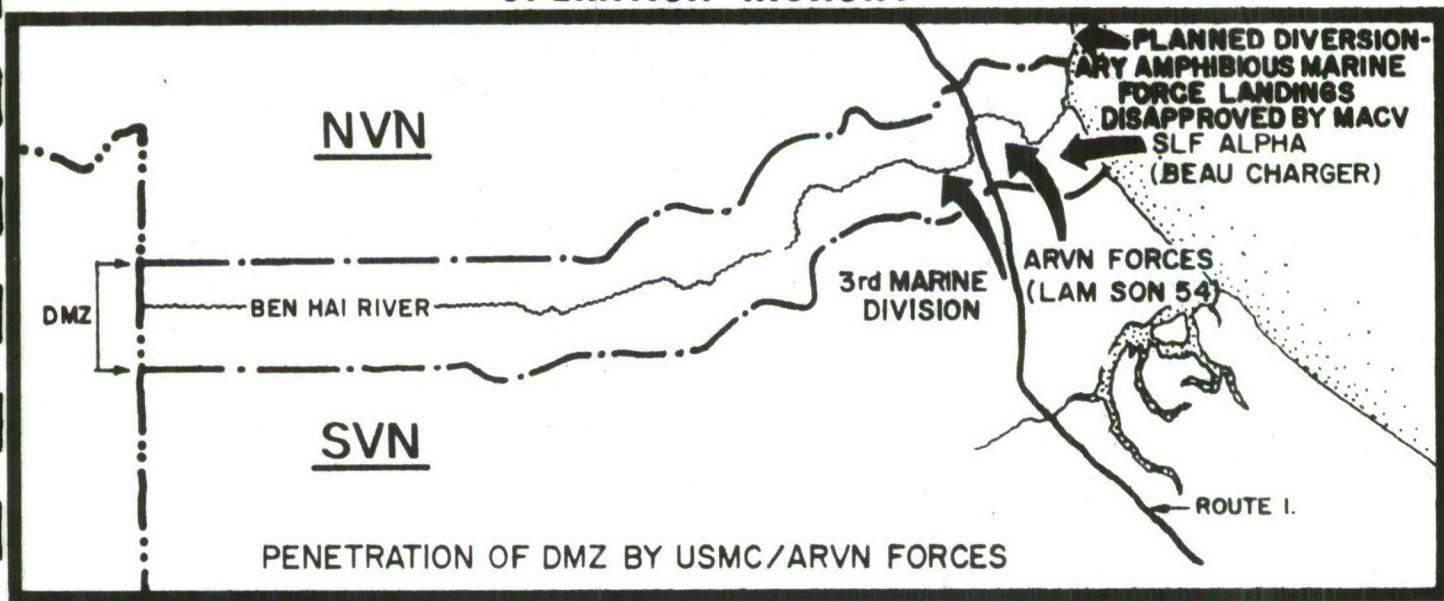


FIGURE 1

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was marred by inadequate joint planning and coordination. This situation was compounded by the limited dissemination of planning information by the III Marine Amphibious Force (MAF), with the effect that their own control agency was not advised of the schedule to be followed by the Marine landing force. This resulted in the SLF Alpha force making its landing without the cover of airpower. The Marine Control Agency, "Land Shark Bravo," first became aware of the landing when an emergency request for air support was received because the landing force was in "deep trouble."<sup>3/</sup>

Operational concepts were not finalized until the day before the operation was to be launched, and many details remained to be resolved.<sup>4/</sup> In addition to the ground thrust into the DMZ, supported by heavy air and artillery fire, the Marine plan called for an amphibious demonstration off the beaches of North Vietnam, approximately 30,000 meters north of the Ben Hai River which runs through the center of the DMZ. This was planned to confuse the enemy, delay his decision on employment of reinforcements for the DMZ area, prompt a disclosure of shore defense weapons north of the DMZ, and create concern as to whether amphibious attacks were contemplated against the enemy north of the DMZ.<sup>5/</sup> The III MAF was not informed by COMUSMACV until 17 May, one day prior to execution, that the amphibious demonstration was disapproved.<sup>6/</sup>

Key Air Force officials were first briefed on the III MAF concept after 7AF Cmdr, Lt. Gen. William W. Momyer, directed his operations staff to initiate coordination with the Marines for Air Force support. On 14 May,

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Col. J. A. Hagemann and Col. J. C. Buie from the 7AF TACC flew to Da Nang and Phu Bai for briefings by Marine officials. At that time no operations order or plan had been published. The briefings were very general in nature with the implication that very few people knew of the plan and that "extreme secrecy was absolutely necessary". No firm air requirements were established at these meetings; however, a question regarding command and control of air resources in the operational area was raised 7/ by the Marine authorities.

Since 20 July 1966, the 7AF Cmdr had been conducting a continuous interdiction campaign known as TALLY HO in an area which extended north from the DMZ into the southern portion of Route Package I. More recently, the Marines had positioned artillery which was capable of firing into and beyond the DMZ, in northern Quang Tri Province. Coordination problems affecting air and artillery striking in the same area were revealed in early April when both resources were directed against a surface to air 8/ missile (SAM) site located just north of the DMZ. At the meeting on 14 May, the 7AF officials were informed that the Marines had on the previous day requested that COMUSMACV give the ground commander control of air and/or artillery in the area of TALLY HO and the DMZ that could be reached by artillery, i.e., 30 kilometers from the Marine artillery bases 9/ at Gia Lin and Camp Carroll.

Marine rationale was based on the premise that the ground commander normally has cognizance over the ground, within effective range of his organic artillery, and that TALLY HO responsibilities were developed and

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allocated when "only air could take under fire targets located in the 10/ DMZ". Seventh AF officials advised the Marines, on 14 May, that the Air Force "could not go along with the ground commander control in TALLY HO," but was prepared to support the operation "to the degree required". It was indicated that 7AF would operate primarily in an interdiction role north of the Ben Hai River and in close air support (CAS) of ARVN forces; the Marines would provide close air support for their forces south of the Ben Hai River. Marine or USAF forces could be diverted if required. A command decision would be required in this event. This tentative verbal arrangement was a prelude to subsequent inconsistencies which 11/ characterized the planning phase of Operation HICKORY.

Indicative of these inconsistencies involved in planning, timing and coordination was an operations order published by the 1st Marine Air Wing (MAW) on 16 May. This order was issued prior to the publication of 12/ an operations order by the parent organization, the III MAF, and the decision by COMUSMACV on actual areas of responsibility. The operations order directed that close air support and direct air support would commence in the air operations area, which was defined as the DMZ area north and south of the Ben Hai River, including that portion north of the DMZ 13/ which could be reached by Marine artillery (175mm guns). This conformed to the desires expressed by III MAF in the 13 May request to COMUSMACV; however, it was not in consonance with 7AF concepts nor the verbal arrangement presented by Air Force officials on 14 May. The order further stated that an augmented DASC (Direct Air Support Center) would be established to "provide control of all fixed and rotary wing

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aircraft in support of Operation HICKORY," and that the 1st MAW would frag all air support within the air operations area, "including that 14/ outside RVN".

Late on the afternoon of 16 May, a COMUSMACV message establishing areas of responsibility for Operation HICKORY was dispatched. This message designated the northern boundary of the DMZ as the forward bomb line (FBL), and that the III MAF would be responsible for coordinating the application of air, artillery, and naval gunfire in the I Corps Tactical Zone (CTZ) and in the DMZ. The III MAF Commander was also responsible for establishing joint and combined planning coordination measures required in connection with III MAF/USAF/RVNAF air operations in I Corps and in the DMZ. All fire, air and artillery, delivered north of the designated FBL would be coordinated with 7AF through the control reporting post ("Waterboy") at Dong Ha and the Airborne Command and Control Center ("Hillsboro"), with the 7AF Commander making final determination of fire support means to be employed. 15/ Therefore, the Ben Hai River slicing the DMZ was not the dividing line between USAF and Marine responsibility, as tentatively agreed to by TACC officials at Phu Bai on 14 May, nor did the Marines have responsibility for operations north of the DMZ, as recommended by III MAF on 13 May, and so defined in the 1st MAW operations order on 16 May. The fact that some confusion regarding command and control responsibilities still existed after the operation was launched was borne out on 18 and 19 May when the Marine field commander directed 7AF forward air controllers (FACs) to direct

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strikes just north of the Ben Hai River. This subsequently jeopardized operations as this had not been properly cleared through the TACS and the ABCCC Hillsboro directed the FACs back into the 7AF area north of 16/ the DMZ.

General Momyer, 7AF Commander, presented the Air Force concept for Operation HICKORY to COMUSMACV on 16 May. He advised that the 7AF was prepared to conduct a "Slam" type operation, commencing with B-52 ARC LIGHT strikes, environment permitting, to inflict an initial shock and to open up the area. Concentrated tactical air strikes would follow for a three-hour period prior to the assault and would continue for as long as the requirement existed. Aircraft would strike targets developed and updated through photo, sensor and visual reconnaissance, with targets of opportunity being exploited as they were developed. Strike aircraft would be scheduled into the 7AF area of operations under Hillsboro, forward air controllers, and MSQ-77 radar control ("Combat Skyspot") every 15 minutes throughout the first day of operation and continued on a daily basis "as the tactical situation dictates". Operational areas were in accordance with the COMUSMACV Directive.

Four wings of aircraft would be required to support the 7AF concept. Seventh AF was prepared to provide one wing of F-105s, two wings of F-4Cs, and requested that a USN carrier attack task group be provided under 17/ mission control of the TACS. The integration of Naval air into the operation brought with it additional time-consuming coordination problems which were to limit the effective application of air through the TACS during the early stages.

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To obtain the use of Naval sorties, 7AF had to submit a proposal to COMUSMACV who, in turn, had to request approval from CINCPAC. Requests were submitted on 16 May. In the meanwhile, the Navy presented a proposal, concurred in by III MAF, that the Navy would support the Marine landing force, SLF Alpha, as their participation in HICKORY and the Marines would provide the remainder of the air support required by the Marine assault force. Seventh AF did not concur, and the Marines reluctantly accepted the responsibility for SLF air cover. It was agreed Navy strike sorties would be controlled through the TACS and would be applied primarily to the north of the DMZ; however, further delays in 18/ planning were experienced.

While these discussions were still underway, the TACC obtained verbal information from the 1st MAW that the tentatively selected D-Date of 18 May was firm, with H-Hour at 0800. Since approval for Navy sorties had not been received by the morning of 17 May, the "large requirement for prep fires" had to be met from 7AF resources. On 16 May, General Momyer directed that approximately 100 strike sorties be executed in the area just north of the DMZ on 17 May; 122 were flown. The Marines scheduled a like number in the DMZ, but no execution order had yet been 19/ received.

Approval for the use of Navy sorties was received late on the afternoon of 17 May. The 7AF TACC learned that the Naval forces had been approved through the Naval Liaison Officer, 7AF Headquarters, at approximately 1645 hours and, at approximately the same time, it was learned

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U.S. Marine Assault Airlift CH-46  
Helicopters (USMC Photo)  
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the tentative date of 18 May was firm. The frag was prepared for Naval and AF sorties. The Navy had to be fragged to a FAC, Combat Skyspot or armed reconnaissance, in that order, since they did not have target materials. Target materials were dispatched on the afternoon of 17 May but would not arrive in time for target study. Approximately 147 Air Force and 120 Navy sorties were scheduled for 18 May, with first time on target (TOT) for 7AF strike aircraft set at 0700 hours and first 20/ Navy TOT set at 0800 hours.

A prerequisite for an operation of this magnitude is the early determination of forces to be employed. This is basic for the employment of ground forces, and it holds true for the effective control and application of strike aircraft. Under centralized control, the determination of forces, as well as requirements and areas of responsibility, presents no problem. However, fragmented control of air assets as experienced in the planning for HICKORY produced certain inconsistencies. Commenting on the impact of the late Naval air commitment to the TACS, 21/ Colonel Hagemann, 7AF TACC, recalled:

"...It was quite obvious after the first few hours of operation on the morning of 18 May that we were putting sorties into the area north of the DMZ at a faster rate than Hillsboro and the Forward Air Controllers could handle them. This was due primarily to the launch cycle off the carrier and our own Air Force sorties not being properly meshed. Navy sorties were arriving every one and one-half hours in sections of twelve and Air Force flights approximately every thirty minutes. This was no fault of the Navy since we had accepted this carrier cycle. However, a little prior planning for this specific operation could have

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prevented this particular problem. The problem was resolved for 19 and 20 May by proper TOT scheduling...."

This pattern of confusion in planning at higher echelons also had a detrimental effect on planning by operational units. Both USAF and Marine air cadres involved in the actual function of air support in Operation HICKORY were not properly informed during the early phases. As planning progressed, a minimum of information began to filter down to the units that were to become actively involved.

The 7AF Air Liaison Officer (ALO) to the 1st MAW, Lt. Col. Edwin R. Henly, was given a general briefing on the operation at the 7AF TACC on 15 May. He returned to Da Nang AB on the 16th and learned that no one at the 20th Tactical Air Support Squadron (TASS), which would provide the FACs, TALLY HO Intelligence, or the ABCCC Hillsboro, was aware that 100 additional sorties were to be fragged into their area the next morning, nor were they aware of the impending operation. Lt. Col. Henly briefed the units at Da Nang on the available facts. TALLY HO FACs, known as "Coveys", were based at Dong Ha near the DMZ. One of these FACs, Capt. Harold Campbell, was at Da Nang on the 16th, and carried word of the 22/ operation back to his unit.

The 7AF ALO had received an acetate overlay consisting of 64 numbered blue dots representing Marine targets in the operational area. This target overlay which had been prepared by the 3rd Marine Division was designated under a Marine system which did not correspond to that used by the Air Force. There were no photos, target intelligence, or descriptions

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provided but these were the targets which were to be hit by air on 17 May. The targets on the overlay were within the DMZ and north of the DMZ in the TALLY HO area. This overlay was not received by the 7AF TACC in time to issue frag orders for the preparatory strikes on targets 23/ designated by the Marines. 24/ With regard to these targets, Lt. Col. A. W. Talbert, 1st MAW Operations Officer, said:

"...We passed the information to the FACs at Dong Ha so that the Air Force and Marine FACs were able to look at the targets -- they had already flown over them by the way -- and pick out specific targets that they wanted to hit the next day which was the 17th or D-1...."

However, it was only by coincidence that a Covey FAC had been at Da Nang for Lt. Col. Henly's briefing and was given a copy of the target overlay or further delay might have been experienced in getting the word to Dong Ha if he had not been there. Furthermore, the Covey FACs at Dong Ha had not flown over all the targets because many of them were outside the boundaries of their TALLY HO visual reconnaissance line in an area which was not permissive to O-1 FAC operations. Additionally, D-Day had not received command confirmation and, as late as the evening of 16 May when the 7AF Commander ordered Grand Slam, it was not certain the 17th would be D-1.

By the time Captain Campbell returned to Dong Ha, little more than 12 hours remained before the Slam-type operation would be initiated. 25/ Captain Campbell recalled:

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"...At Da Nang I was told that Waterboy, the local GCI site, and Landshark Bravo, the Marine DASC, already had advance information on this operation and would be able to coordinate with us on the number of sorties and what we would use for effective coverage.

"After I landed at Dong Ha, the first thing I did was to brief all the officers and airmen assigned to TALLY HO who would be involved in the operation. We then decided that it was going to involve such a number of additional Air Force sorties that we would go over to Waterboy and coordinate their operation before we did anything else. However, when we talked to the people at Waterboy, including the site commander, we found out that they didn't know anything at all about the operation other than the code name and the fact that something was going on.

"We found the very same thing when we went over to Landshark Bravo. They had not received any advance information other than the fact that they knew that there was an operation coming off. Since Landshark Bravo didn't know anything about it, we decided to come over here, draw up our maps with the targets on them and then took a map that we had made over to Landshark Bravo so they could use it for their coordination. We stayed up most of the night preparing these maps, realizing only that we were going to get additional sorties the next day."

After Captain Campbell's briefing, the Task Force TALLY HO Operations Officer, Maj. William Newell, visited Waterboy and found that neither the commander nor operations were aware of the upcoming operation. Major 26/ Newell reported:

"...We spent a good deal of the evening with them making various efforts to find out. They queried through their communication net various sources, and we obtained no additional information at all. We then went to the Marine DASC and talked directly

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to them. They of course were aware of the operation, and together we worked out a plan by which the air effort controlled by TALLY HO would be coordinated into their overall plan.

"Roughly, we worked out with the DASC that while they were firing artillery and putting in Marine air strikes into the landing zone south of the Ben Hai River, we would hold our strikes to a point north of the DMZ. As it later turned out, this concurred with the information in our frag.

"After their prep was completed and the helicopter assault was taking place, we were to bring down our air strikes from above the northern border of the DMZ right down to the river. General Robertshaw (CG, 1st MAW) had said also that the river was a very natural, easy to see boundary, and since the DMZ belongs to the Marine Corps, we would use the river for the dividing point for Air Force versus Marine efforts."

27/  
The Marine Commander of Landshark Bravo, Maj. Allen C. Getz, recalled:

"...The information leading up to our knowledge of this operation originated with Covey pilots coming over the evening prior to commencement of the operation, 16 May, asking what to do with their 100 flights of aircraft coming up. The day prior to the operation, 17 May, we did receive the 9th Marine Operations Order which at least put forth that particular aspect of it. However, it did not include the SLF coming ashore. Unfortunately, this particular area was so secret that all we knew about it was they were going to come ashore at some period of time."

At the time this coordination was being accomplished by the operational units, the COMUSMACV decision on areas of responsibility was being dispached. The only specific information available to these units was the number of additional sorties they could expect on the following day.

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Lacking specific details of the overall operation and command and control procedures, they devised their own plans and coordinated the procedures to be used in controlling the heavy influx of air on the 17th.

ABCC personnel received the general briefing by Lt. Col. Henly at Da Nang on 16 May. On the 17th the Hillsboro Commander was briefed at the 7AF TACC at Tan Son Nhut. He received specific instructions on the assigned area of responsibility in the TALLY HO area for Operation HICKORY. There were no special instructions provided on methods of operations or relationships with Marine Control facilities. <sup>28/</sup> The ABCCC considered his area of responsibility to lie north of the DMZ, while the Covey FACs, 1st MAW officials, the ALO to the 1st MAW, and the Marine control agency Landshark Bravo were using the Ben Hai River as the dividing line for control of air and artillery. 1st MAW frags for the 18th were based on this assumption.

Late on the evening of 17 May, the CG 1st MAW, Maj. Gen. Louis B. Robertshaw, called a planning meeting at which the dividing line for control was still considered to be the Ben Hai River. There were still no targets available for the 18th. The 7AF ALO, who was present at the meeting, commented on the lack of information available to the <sup>29/</sup> participating units:

"...The 1st MAW assembled at 2100 on the 17th to plan for the operation that was scheduled to jump off at 0500 on the 18th. All previous planning had been done with the utmost secrecy. It was so

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secret that the Wing and I DASC still do not have  
a III MAF operations plan (as of 24 May). ✓

"We still had no targets. The 3rd Marine Division at Phu Bai was providing them (targets) to the radar controllers at Dong Ha and they would in turn pass them out to the FACs to be used the following day. But, as for planning and being able to select the proper ordnance for the proper target, there wasn't any of this available due to the fact that Operation HICKORY was so highly classified by the Marines, they didn't even let the Marine air arm know what was going on. We ended up with no information and based everything we did on assumptions...." ✓

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Colonel Hagemann, 7AF TACC, said of the planning phase:

"...With the sensitiveness of the operation, unknown factors, i.e. participation by Navy forces, planning and coordination was most difficult.

"Command and control procedures were still being discussed when the operation began. During the planning phase the operation was so shrouded in secrecy that only a very few knew of its existence. Coordination could not be adequately accomplished. There were a multitude of details that should have been resolved prior to execution."

A message from the CG III MAF to COMUSMACV, dispatched at noon on 17 May, said, "Current indications are that Operation HICKORY and its associated opns (Opn Lam Son 54, Opn Beau Charger) will be initiated 31/ on 18 May as planned." The use of the words "current indication" implied that some indecision concerning the execution order still existed at this late date ... one day prior to D-Day.

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3. Preparatory Air Strikes - 17 May

Details for the preparatory strikes on 17 May had been worked out between the Covey FACs, Waterboy GCI personnel, and the Marine control agency, Landshark Bravo, at Dong Ha, based primarily on information received by Capt. Campbell at the Da Nang briefing on 16 May. At approximately 0300 hours on 17 May, the Covey FACs received a message from Hq 7AF advising that previous instructions were obsolete and that the FACs were not to direct strikes south of the northern boundary of the DMZ. They were also informed that the Air Force sorties would be controlled by Hillsboro rather than Landshark Bravo and Waterboy, which negated most of the mutual planning done at Dong Ha.

32/

Commenting on the 17 May strikes, Capt. Campbell said:

"...This is primarily the way we worked the first day. The first FAC sortie up controlled some strikes on the targets that we had been briefed on (by Lt. Col. Henly from the target overlay). Hillsboro was not in the area, and the Coveys had to assume control and put the strikes where they wanted them. But the rest of our effort the first day was involved entirely with targets north of the northern boundary of the DMZ on artillery positions and some triple-A positions. We were concentrating on artillery positions.

"I was fortunate enough on the first day to observe a six gun battery of artillery firing, and since we had airpower stacked up three or four deep at the time, it was a simple matter to put flights on these positions and we did manage to silence them. We also found an artillery observation post, numerous mortar positions, and positions where artillery could be fired from. We expended most of our flights in and around the area immediately north of the northern boundaries of the DMZ on the first day."

During the Slam Operations on the 17th, a total of 122 sorties were executed under 7AF control. Results of the Slam prep included

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four artillery pieces destroyed, three artillery pieces damaged, eight artillery gun positions destroyed and two positions damaged, six AAA positions destroyed and one damaged, seven military structures destroyed and one damaged, 11 watercraft destroyed, and three trucks destroyed. There were nine secondary explosions, three secondary fires, and an estimated 65 enemy killed by air (KBA).

That night the enemy retaliated by staging a heavy rocket and artillery attack against Dong Ha. "Milky", the Dong Ha Combat Skyspot center, was badly damaged and down for repairs for several days as a result of direct hits. Landshark Bravo also suffered some damage to new equipment just brought in to increase their capability to handle the additional air required to support HICKORY. Major Getz recalled: "We got the equipment up on the 17th, worked until about midnight getting it all set up and then about three o'clock in the morning they proceeded to knock about half of it out. So, as soon as the attack was reasonably over, we went back to work and put it <sup>33/</sup> all up again."

#### 4. Confusion on D-Day

The need for centralized control of air assets was graphically demonstrated on the morning of 18 May when the Air Force FACs began directing strikes just north of the Ben Hai River rather than their fraged area above the DMZ. This was in consonance with personal directions given to the FACs by Maj. Gen. Robertshaw, the I Marine Air Wing Commander. General Robertshaw visited Dong Ha on the 17th

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and briefed the Air Force FACs, giving them specific instructions on the air support he needed north of the Ben Hai River in the DMZ to protect his helicopter assault into the areas immediately south of the river. According to the Task Force TALLY HO Operation Officer, 34/ Major Newell: "His specific desires were that we put in our sorties right down to the river."

General Robertshaw's rationale was that the northern boundary of the DMZ was not discernible, while the river made an easily identifiable boundary. He said that, for the period of Operation HICKORY, the DMZ was "the property of the Marine Corps", and that he would be directing his Marine artillery and air in support of the ground thrust 35/ south of the river.

When the Marine ground forces began moving into the DMZ on the morning of 18 May, the Covey FACs followed the Marine instructions. 36/ Major Newell recalled the resultant problems:

"...We began operating on what we knew to be General Robertshaw's personal desires. Hillsboro, of course, then made us restrain our efforts below the northern border of the DMZ, and we directed the remainder of our strikes north of the DMZ on artillery positions that could have been a threat to the operation. But, we did not consider them as great a threat as those existing down in the northern part of the DMZ itself -- down toward the river.

"The Marines, noting the lack of fire on the targets just across the river from them, became apprehensive and queried us as to what we were doing with all the Air Force sorties they were supposed to get. At the same time they started putting their own air strikes in north of the river.

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"This was probably the biggest area of conflict we had, and it remained unresolved up to the third day. On the third day, the Marines put in a second helicopter assault in an area about four clicks (kilometers) east of the one that occurred on the first day -- just south of the river. And again, General Robertshaw requested that we put the air in right north of the river. On the early morning sorties we did just this, starting shortly after six o'clock. And when Hillsboro came on the air again, their instructions stopped us again from putting sorties in there and again confined us to putting in the sorties north of the DMZ.

"The Marine Corps had put in two waves unopposed while we were putting in strikes in the DMZ itself just north of the river. But, just after we moved north, a third helicopter wave came in and received heavy mortar and artillery fire from the area that we had just stopped hitting. This third wave was able to move out of the fire with a minimum of casualties and changed to an alternate landing zone. They got in alright."

As the ground forces began sweeping into the DMZ the morning of the 18th, several other problems arose. The ARVN forces received no preparatory fire support in their area and were furnished with a minimum number of preplanned sorties on the 18th. Col. Henly <sup>37/</sup> explained: "The ARVN, who in Lam Son 54 were sandwiched between the airborne assault landing and the HICKORY Operation, received no pre-jump off support and only had six to eight sorties scheduled for standby on the 18th to support their operation."

Another problem arose when the Marine Landing Force SLF Alpha hit the beaches. Although the Marines were responsible for providing air support to this force, neither the DASC, Landshark Bravo, nor the

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1st MAW had prior information on the SLF landing. Major Getz, who  
38/  
was in charge of the Marine control agency, commented:

"...This particular area (the SLF landing) unfortunately was so secret that all we knew was they were going to come ashore at some period of time. I was just talking to Major Walker, who was the liaison man. He said they did pass an air schedule on the 16th which we never received, so we had no information as to what transpired until approximately 7:30 they called us on the radio and requested emergency FAC and fixed wing because they were in pretty deep trouble...The only real stumper was the SLF which came ashore in the DMZ and surprised us somewhat when suddenly here are people in very serious trouble screaming for airplanes to assist them."

39/  
Col. Henly confirmed the lack of knowledge about the SLF:

"...In connection with the assault landing area, the first Marine Aircraft Wing didn't even know where the helicopters were going to land to dump the Marines. Consequently, Lt. Col. Kirby came down to the wing after it was all over and said he had received 30 hits and had two airplanes forced to land by the enemy ground fire. These are helicopters on the SLF. We still don't have the MAF Operation Order for the exercise as of the 24th and I know 7th Air Force didn't get anything until the 22nd."

Air saturation added to the confusion on the 18th. When the Covey FACs received their initial information concerning the number of sorties fragged for the 18th, they had scheduled two FACs to handle the flights. They believed this sufficient, considering the spacing of the flights and the small area they were to be working in. How-  
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ever, according to Major Newell:

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U.S. Marine Forward Air Controller and  
Artillery Forward Observer (USMC Photo)

Figure 3

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"...(We) had a conversation with the 20th TASS, and the operations people down there were concerned that we did not have enough FACs planned into the area to handle all the sorties that were coming in. We had received changes to our frag order that gave us additional Air Force sorties, and after considering the numbers and times on target, we figured that two FACs could handle it...We knew that the flights would be in there fast on the heels of each other, but we figured that two FACs could handle it very easily.

"At this time the operations people of the 20th TASS referred to some Navy-type sorties coming in -- I think they used the word Bellbottom -- and I said no we hadn't received any word about any Bellbottom at all... What the 20th TASS people were referring to was an extra 100 Navy sorties that were fragged into the area that we had no word of. Had we had word of it and more FACs in the area it still would not have helped because, simply again, the area was not big enough for four FACs to operate. The gist of it is that a day late we did get a message in here at Dong Ha that told us of what the 20th TASS people had mentioned. They told us of 100 extra Navy sorties coming in. This information was a day late as far as our operation was concerned."

Capt. Campbell commented on the deployment of Covey FACs on the  
41/  
18th:

"...Because of the fact that there were so many sorties, we decided the second day that we would try and fly four Covey airplanes (on the 18th). However the area that we had to employ these strikes in was so small that we could seldom use four FACs effectively and so we used two to control the air-power and two to perform any normal VR mission north of the immediate area that Operation Hickory was involved in."

Controlling this large number of sorties into the small working area became immediately a serious and sometimes dangerous problem for

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the FACs. Capt. Campbell illustrated this:

"...We are talking now about a physical area of approximately ten square miles and it's virtually impossible to work more than one flight of fighters in an area this size at the same time. So what we worked out with Landshark Bravo was that they were going to keep all their airplanes south of the river and work them in left hand patterns and we would keep all our aircraft north of the river and work them in right hand patterns running roughly east or west along the boundary of the river.

"This worked very well for us the first day and we had very few problems as far as aircraft in the immediate vicinity becoming confused or having to look out for each other while they were being controlled...."

43/

Major Newell recalled:

"...Higher headquarters gave us orders to have more FACs in the area in order to handle fighters. We complied with this and had more FACs there. We had four FACs available in fact. However, this was not the solution. The problem simply was there were too many flights assigned into too small an area in too short a time. We could not operate more than one flight safely into this area. At times, we put in two flights simultaneously and this was, to say the least, hazardous. There were several very close near misses between FAC and fighter aircraft and fighter aircraft in one flight and fighter aircraft in another flight."

Hillsboro, the ABCCC, also experienced numerous difficulties on the 18th due to the large number of sorties fragged and the consequent 44/ saturation. Col. Newfield explained:

"...Tally Ho frag Nr 686, with changes, was received prior to flight. Only time blocks for Navy sorties were received on change two.

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"Type of aircraft, ordnance and number in flight had to be learned as strike flights checked in to Hillsboro. When Navy aircraft checked into Waterboy - as all aircraft entering the area do--there was no way of determining if the flight was flagged to Hillsboro control or for special Marine operations in the Banjo (DMZ) or in-country. Navy sorties arrived in many cases with less than five minutes separation. Some Air Force sorties arrived at times other than scheduled. Locust flight due 1000 TOT (time on target) was in at 1045 and out at 1119H. Hammer 31 TOT 1330H was on target at 1422 and off at 1424. These are examples. If one flight is several minutes late and the following flight is several minutes early, this creates problems.

"Photo recce in the area also creates control problems when the recce bird had to penetrate the strike flight area. The limited airspace for special strike operations in the target area, combined with arrival times of all sorties, resulted in saturation of Air Force FACs. Some strikes were diverted to armed recce of route 1A and 101 in central and northern Tally Ho. At the time, the Marine control facilities, Devastate Delta and Landshark Bravo, were saturated.

"There were no requests to Hillsboro for CAS of the Marine operation, except for four sorties that were expended by Devastate Delta at the end of the period by Combat Skyspot activity...By 0830H, Waterboy was directed by Hillsboro to hand off all ingressing Navy and Marine flights to the Marine control facilities. When these facilities became saturated, the overflow was handled by Hillsboro in its special area of operation, and if required in Tally Ho North."

Col. Henly summed up the results of the oversaturation and poor meshing of sorties on the 18th in a message sent to TACC. The message stated that 18 Air Force and 12 Marine sorties did not expend in support of the operation. They either recovered with the ordnance

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or dropped outside the operation area. The TACC final wrap-up of Operation HICKORY also revealed that 45 of the Navy sorties fragged under Air Force control on the 18th were diverted to USMC control when Hillsboro and the FACs became saturated.

Despite these difficulties, a total of 161 sorties were flown under Air Force control in support of Operation HICKORY on D-Day. These included 111 USAF and 50 Navy sorties. All Marine aircraft were under Marine control on the 18th. By the end of the day, most of the serious problems had been worked out. The lower echelons had adapted their methods and plans to fit the existing situations and were able to operate successfully, using these improvisations.

The Marines found themselves in a difficult position on the 19th. On D-Day, two of their three O-1 aircraft had been shot down and the third was temporarily out of commission. An emergency request for airborne FAC support was sent to I DASC and an Air Force FAC, the I DASC ALO, was sent up to the DMZ to conduct air strikes for the Marines on the 19th. He flew five missions on the 19th and put in 46/ over 40 strike sorties during that time.

The heavy commitment of sorties under Air Force control continued through the 20th of May. Air Force sorties into TALLY HO reverted to a normal schedule on 21 May. The Marines had planned a maximum effort on the day prior to the 24-hour truce in honor of Buddha's birthday, 23 May. Due to targets of higher priority in TALLY HO and TIGER HOUND

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the request could not be honored. For the period 17 through 20 May, 365 Air Force, 215 Navy, and 19 Marine for a total of 599 sorties, supported Operation HICKORY under the control of Air Force agencies. Total results from this massive air effort included 23/3 artillery pieces destroyed/damaged, 20/2 artillery gun positions destroyed/damaged, 21/1 AAA positions destroyed/damaged, and 293 confirmed and estimated KBA. There were 43 secondary explosions, 20 secondary fires, 14/1 military structures destroyed/damaged, 11 watercraft destroyed, 11/5 trucks destroyed/damaged, 26 road cuts, 48/ and one bridge damaged.

Although all three phases of ground operations into the DMZ began on 18 May, they terminated separately. The SLF (Operation Beau Charger) ended at 1100 hours on 26 May with friendly losses of 23 KIA and 79 WIA. Enemy results were 83 KIA, 13 small arms, and 6 crew-served weapons captured. The ARVN phase of the DMZ sweep (Operation Lam Son 54) ceased at 1400 hours on 27 May. Their casualties were 22 KIA and 112 WIA for enemy losses of 392 KIA, 80 detained, 38 small arms and 9 crew-served weapons captured. Operation HICKORY was completed at midnight on 27 May and resulted in 119 Marines KIA and 817 WIA. The enemy sustained losses of 367 KIA, 36 detained, 86 small arms and 22 crew-served weapons seized. 49/

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5. Conclusions

The execution of Operation HICKORY prior to the finalization of necessary planning and coordination precluded the most effective application of airpower. This was directly attributable to the problem created by two systems for tactical air application functioning within one tactical situation. The following deficiencies resulted:

- Participating air cadre were poorly informed prior to execution and during the early phase of the operation.
- There was confusion among the control agencies as to areas of responsibility and the extent of forces that they would be controlling.
- Navy air did not participate in the preparatory fires to the degree envisioned in the concept of operations.
- At Da Nang, matching ordnance and targets was virtually impossible.
- Target materials were not available for Navy air in time to be used for the D-Day strikes.
- There was insufficient time to mesh Navy and Air Force TOTs, leading to a saturation of the control agencies.
- Because of this saturation some strike sorties were diverted from the operational area.
- Flying safety was jeopardized.
- The Marine landing force did not have air cover on its initial landing and encountered trouble.
- Marines made requests for Air Force support outside proper TACS channels.

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- A Marine assault wave was endangered after USAF aircraft were pulled out of their landing area to comply with control agreements.

After analyzing these deficiencies, Colonel Hagemann recommended a solution which USAF officials have been urging since the TACS was first established in South Vietnam; that command and control of all airpower resources be vested in one agency, the Deputy Commander for Air, MACV. Colonel Hagemann points out that artificial boundaries of command and control responsibilities are always confusing and can be disastrous if the enemy is determined to resist to the limit of 50/ his capabilities on a fluid front. Although centralized control is not a panacea for the solution of all problems encountered in the application of air in SEA, it would preclude the generation of additional problems such as the ones experienced in Operation HICKORY.

The operation further demonstrated that the assignment of one service for mission control in no way alleviates the lengthy planning and coordination required in the existing environment. The Air Force had mission control, as far as Navy air was concerned, yet it was not known whether or to what extent the Navy would participate until 51/ shortly before H-Hour. Under the restrictions imposed upon the TACS in this particular operation, adequate planning was virtually impossible and the optimum application of airpower could not be assured. When weighed against the realities of Operation HICKORY, centralized control ceases to be doctrinal question. It becomes an operational requirement.

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G L O S S A R Y

ABCCC	Airborne Command and Control Center
ALO	Air Liaison Officer
ARVN	Army of the Republic of Vietnam
CAS	Close Air Support
COMUSMACV	Commander, U.S. Military Assistance Command, Vietnam
CTZ	Corps Tactical Zone
DASC	Direct Air Support Center
DMZ	Demilitarized Zone
FACs	Forward Air Controller(s)
FBL	Forward Bomb Line
GCI	Ground-Controlled Intercept
KIA	Killed in Action
MAF	Marine Amphibious Force
MAW	Marine Air Wing
RVN	Republic of Vietnam
SLF	Special Landing Force
TACC	Tactical Air Control Center
TACS	Tactical Air Control System
TAOR	Tactical Area of Responsibility
TASS	Tactical Air Support Squadron
TOT	Time Over Target
VNAF	South Vietnamese Air Force
WIA	Wounded in Action

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## F O O T N O T E S

(Documents as noted provided in one copy to AFCHO and in DTEC file copy.)

1. (TS) CHECO Study, subj: Control of Airstrikes, 1964-66.
2. (TS) Msg., CG III MAF, 15102, subj: Operation Hickory, 15 May 66. (Hereinafter cited as Operation Hickory.)
3. (S) Interview, Lt Col Henly, AF Liaison Officer, 24 May 67. (Hereinafter cited as Lt Col Henly); and (S) Interview, Maj Allen Getz, USMC, OIC Det Bravo, 26 May 67. (Hereinafter cited as Major Getz.) Doc. 1.
4. (S) Report, TACD, subj: AF Participation in III MAF Operation Hickory, 26 May 67. (Hereinafter cited as TACD Report, 26 May.) Doc. 2.
5. (TS) Operation Hickory.
6. (TS) Msg., COMUSMACV, 03102, subj: Operation Hickory, 17 May 67.
7. (S) Report, TACD, subj: AF Participation in III MAF Operation Hickory, 20 May 67. (Hereinafter cited as TACD Report, 20 May.) Doc. 3.
8. (S) Msg., 7AF, 16152, 30 Apr 67.
9. (S) TACD Report, 20 May. Doc. 3.
10. (S) Msg., CG III MAF, 01042, subj: Air/Artillery Coordination, 13 May 67.
11. (S) TACD Report, 20 May. Doc. 3.
12. (S) Lt Col Henly. Doc. 1.
13. (TS) Ops Order 322-67, 1st MAW (Hickory), 1500H, 16 May 67.
14. Ibid.
15. (S) Msg., COMUSMACV, 0939, subj: Air/Artillery Coordination, 16 May 67.
16. (S) Interview, Maj William Newell, Ops Off Tally Ho, 26 May 67. (Hereinafter cited as Maj Newell.) Doc. 4.
17. (TS) Msg., 7AF, subj: Tactical Air Support of Operation Hickory, 0100Z, 16 May 67.

# UNCLASSIFIED

18. (S) TACD Report, 20 May. Doc. 3.
19. Ibid.
20. Ibid.
21. (S) TACD Report, 26 May. Doc. 2.
22. (S) Lt Col Henly. Doc. 1.
23. Ibid.
24. (S) Interview, Lt Col A. W. Talbert, Ops Off 1st Maw, 27 May 67. (Hereinafter cited as Lt Col Talbert.) Doc. 5.
25. (S) Interview, Capt H. Campbell, Tally Ho FAC, 26 May 67. (Hereinafter cited as Capt Campbell.) Doc. 6.
26. (S) Maj Newell. Doc. 4.
27. (S) Maj Getz. Doc. 1.
28. (S) Special Report, subj: ABCCC Hillsboro Operations/Activities in Tally Ho/Tiger Hound, 18 May 67. (Hereinafter cited as Hillsboro Report.) Doc. 7.
29. (S) Lt Col Henly. Doc. 1.
30. (S) TACD Report, 20 May. Doc. 3.
31. (TS) Msg., CG III MAF, 0436Z, subj: Operation Hickory, 17 May 67.
32. (S) Capt Campbell. Doc. 6.
33. (S) Maj Getz. Doc. 1.
34. (S) Maj Newell. Doc. 4.
35. Ibid.
36. Ibid.
37. (S) Lt Col Henly. Doc. 1.
38. (S) Maj Getz. Doc. 1.
39. (S) Lt Col Henly. Doc. 1.

# UNCLASSIFIED

# UNCLASSIFIED

40. (S) Maj Newell. Doc. 4.
41. (S) Capt Campbell. Doc. 6.
42. Ibid.
43. (S) Maj Newell. Doc. 4.
44. (S) Hillsboro Report. Doc. 7.
45. (S) Lt Col Henly. Doc. 1.
46. (C) Interview with I DASC ALO, no other ident.
47. (S) TACD Report, 26 May. Doc. 2.
48. Ibid.
49. (S) Situation Reports, MACV SITREPS, MACV files.
50. (S) TACD Report, 26 May. Doc. 2.
51. Ibid.

# UNCLASSIFIED